

CLAIMS

*Sub A*

P. An hydraulic system for a wheeled loader having a loader arm assembly which carries a working implement and which is connected to the body and which is movable between raised and lowered positions by means of a hydraulic ram means and in which a hydraulic accumulator is connected to the hydraulic ram means wherein the loader arm assembly is connected at, or adjacent to, the rear end thereof to the body at, or adjacent to, the rear end thereof so that the loader arm assembly extends forwardly whereby, in a lowered position of the loader arm assembly, the working implement is disposed in front of the body wherein each chamber of the hydraulic ram means is connected to a selection valve means adapted to feed fluid under pressure to one chamber of the ram means and to receive fluid at a lower pressure from the other chamber of the ram means in order to raise the loader arm assembly or to feed fluid under pressure to said other chamber of the ram means and receive fluid at a lower pressure from said one chamber of the ram means to lower the loader arm assembly, first and second control valves each of which is movable between a first position in which passage of hydraulic fluid therethrough is prevented in one or both directions respectively to a second position in which passage of hydraulic fluid therethrough is permitted, said first control valve means being connected between said first chamber and said accumulator and said second valve means being connected between said second chamber and a low pressure region and there being a check valve connected between the first chamber and the selection valve means such that the check valve is normally closed to prevent fluid under pressure passing from said first chamber to the selection valve means and having hydraulic fluid responsive means to open said check valve and there being means to connect said hydraulic fluid pressure means to said second chamber so as to open the check valve.

2. A system according to Claim 1 wherein the selection valve is manually operable.

*Subj* 3. A system according to claim 1 wherein the control valves are electrically operated solenoid valves to which current is supplied by a manually operable switch means to cause operation of said ride improvement means when said valves are positioned to permit passage of hydraulic fluid.

4. A system according to claim 2 wherein the selection valve is provided with a switch means to sense the position of the selection valve to close said second control valve when the boom is lowered and said control valves are open.

5. A system according to claim 1 wherein the accumulator and the control valves and the check valve are mounted directly on the ram.

6. A system according to claim 1 wherein at least one of said accumulator, solenoid valves and check valves and connecting pipes are made in metal.

*ATD/PL*